

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 23, 2013

Via E-mail
Edgar Ward
President and Chief Executive Officer
NutraFuels, Inc.
6601 Lyons Road
L 6 Coconut Creek, FL 33073

Re: NutraFuels, Inc.

Amendment No. 2 to Registration Statement on Form S-1

Filed December 5, 2013 File No. 333-191407

Dear Mr. Ward:

We have reviewed your amendment and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 2 to Registration Statement on Form S-1

Management's Discussion and Analysis of Financial Condition and Results of Operation, page 44

Components and Results of Operations, page 45

1. We note your response to comment 2 in our letter dated November 13, 2013, but believe that it does not fully respond to our comment. Please revise your disclosure to clearly explain the changes in each line item of your statements of operations for each of the periods presented in your filing. This should include a comparison of prices and volumes of products sold during each period, as well as clear explanation of changes in each expense line. Line items for the year ended December 31, 2012, should be compared to the year ended December 31, 2011, and the nine month period ended September 30, 2013, should be compared to the nine month period ended September 30, 2012. Please revise your disclosure accordingly.

Edgar Ward NutraFuels, Inc. December 23, 2013 Page 2

Financial Statements for Fiscal Years Ended December 31, 2012 and 2011

General

2. Comment 6 in our letter dated November 13, 2013, asked that you review your financial statements for clerical accuracy. We pointed out that the operating expenses presented as part of your statements of operations (now on page 57) do not appear to sum to the subtotal presented. We reissue our comment, as it appears that this clerical error has not been corrected.

Financial Statements for Periods Ended September 30, 2013 and 2012

3. Please revise the headings on your statements of operations to clarify which columns represent the three month periods and which represent the nine month periods.

Closing Comments

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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You may contact Sandra Eisen, Staff Accountant, at (202) 551-3864 or Ethan Horowitz, Accounting Branch Chief, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters. Please contact Caroline Kim, Attorney-Adviser, at (202) 551-3878 or, in her absence, Timothy Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director

cc: Brenda Hamilton